

Pushing the Envelope			
2000 Mathematics			
Model Academic Standards			
Wisconsin Mathematics			
Grades 5-8			
Activity/Lesson	State	Standards	
Types of Engines ( pgs. 11-23)	WI	MA.5-8.F.8.4.c	Writing and evaluating formulas (including solving for a specified variable).
Chemistry (pgs. 25-41)	WI	MA.5-8.F.8.4.c	Writing and evaluating formulas (including solving for a specified variable).
Physics and Math (pgs. 43-63)	WI	MA.5-8.F.8.1.a	Using appropriate symbolism, including exponents and variables.
Physics and Math (pgs. 43-63)	WI	MA.5-8.F.8.2.b	Describing and interpreting their graphical representations (e.g., slope, rate of change, intercepts).
Physics and Math (pgs. 43-63)	WI	MA.5-8.F.8.4.c	Writing and evaluating formulas (including solving for a specified variable).
Rocket Activity (pgs. 69-75)	WI	MA.5-8.F.8.4.c	Writing and evaluating formulas (including solving for a specified variable).
Pushing the Envelope			
2000 Mathematics			
Model Academic Standards			
Wisconsin Mathematics			
Grades 9-12			
Activity/Lesson	State	Standards	
Types of Engines ( pgs. 11-23)	WI	MA.9-12.D.12.3.d	Determine measurements indirectly*, using formulas in applications (e.g., for compound interest, distance formula).
Types of Engines ( pgs. 11-23)	WI	MA.9-12.F.12.2.b	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including translating different forms of representing them (e.g., tables, graphs, functional notation, formulas).
Chemistry (pgs. 25-41)	WI	MA.9-12.D.12.1	Identify, describe, and use derived attributes (e.g., density, speed, acceleration, pressure) to represent and solve problem situations.
Chemistry (pgs. 25-41)	WI	MA.9-12.D.12.3.d	Determine measurements indirectly*, using formulas in applications (e.g., for compound interest, distance formula).
Chemistry (pgs. 25-41)	WI	MA.9-12.D.12.3.e	Determine measurements indirectly*, using geometric formulas to derive lengths, areas, or volumes of shapes and objects (e.g., cones, parallelograms, cylinders, pyramids).
Chemistry (pgs. 25-41)	WI	MA.9-12.F.12.2.b	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including translating different forms of representing them (e.g., tables, graphs, functional notation, formulas).

Physics and Math (pgs. 43-63)	WI	MA.9- 12.B.12.2.d	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including using appropriate technology to interpret properties of their graphical representations (e.g., intercepts, slopes, rates of change, changes in rates of change, maximum, minimum).
Physics and Math (pgs. 43-63)	WI	MA.9- 12.D.12.3.d	Determine measurements indirectly*, using formulas in applications (e.g., for compound interest, distance formula).
Physics and Math (pgs. 43-63)	WI	MA.9- 12.F.12.2.b	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including translating different forms of representing them (e.g., tables, graphs, functional notation, formulas).
Physics and Math (pgs. 43-63)	WI	MA.9- 12.F.12.2.c	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including describing the relationships among variable quantities in a problem.
Physics and Math (pgs. 43-63)	WI	MA.9- 12.F.12.2.d	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including using appropriate technology to interpret properties of their graphical representations (e.g., intercepts, slopes, rates of change, changes in rates of change, maximum, minimum).
Rocket Activity (pgs. 69-75)	WI	MA.9- 12.D.12.3.d	Determine measurements indirectly*, using formulas in applications (e.g., for compound interest, distance formula).
Rocket Activity (pgs. 69-75)	WI	MA.9- 12.F.12.2.b	Use mathematical functions* (e.g., linear*, exponential*, quadratic*, power) in a variety of ways, including translating different forms of representing them (e.g., tables, graphs, functional notation, formulas).